AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system design method for designing a system which includes a plurality of system components, the method comprising:

defining respective functional representations of the plurality of system components, each functional representation including at least one parameter value; and

automatically defining an allowable set of such parameter values in dependence upon the plurality of system components, wherein the allowable set of parameter values includes ~~defining~~ at least one common ~~compatible~~ parameter values from the respective functional representations of at least two of the plurality ~~for~~ of ~~the~~ components.

2. (Original) A method as claimed in claim 1, wherein one of the system components is a bus.

3. (Original) A method as claimed in claim 2, wherein the functional representation of the bus includes a parameter value relating to bus width.

4. (Original) A method as claimed in claim 1, further comprising choosing an allowable set of parameter values and setting the parameter values of the functional representations concerned to the values defined by the chosen allowable set of parameter values.

5. (Original) A method as claimed in claim 1, further comprising the steps of:

selecting a plurality of system components;

selecting a connection for interconnecting such selected system components; and

selecting one of the allowable sets of parameter values, in dependence upon said connection.

6. (Currently Amended) A system component model for use in a method for designing a system comprising a plurality of system components, the model including a functional representation of the component concerned, which representation includes at least one parameter value for the component, wherein the parameter value relates to a data transfer protocol operation associated with the component.

7. (Currently Amended) A model as claimed in claim 6, wherein the functional representation includes a parameter value that relates to a data transfer protocol role ~~characteristics~~ of the component.

8. (Currently Amended) A model as claimed in claim 6, wherein the functional representation includes a parameter value that relates to a bus width.

9. (Currently Amended) Apparatus for designing a system which includes a plurality of system components, the apparatus comprising:

a data storage medium which is operable to store respective functional representations of a plurality of system components, each functional representation including at least one parameter value; and

a processor which is operable to define automatically an allowable set of parameter values for a selected group of system components, wherein the allowable set of parameter values includes at least one common parameter value from the respective functional representations of at least two of the plurality of the components.

10. (Original) Apparatus as claimed in claim 9, wherein one of the system components is a bus.

11. (Currently Amended) Apparatus as claimed in claim 10, wherein the functional representation of the bus includes a parameter value relating to bus width.

12. (Original) Apparatus as claimed in claim 9, wherein the processor is operable to choose an allowable set of parameter values and setting the parameter values of the functional representations concerned to the values defined by the chosen allowable set of parameter values.

13. (Original) Apparatus as claimed in claim 9, wherein the processor is operable to:

select a plurality of system components;

select a connection for interconnecting such selected system components; and

select one of the allowable sets of parameter values, in dependence upon said connection.

14. (Original) A programmable logic device designed in accordance with a method as claimed in claim 1.

15. (Original) A programmable logic device designed using apparatus as claimed in claim 9.